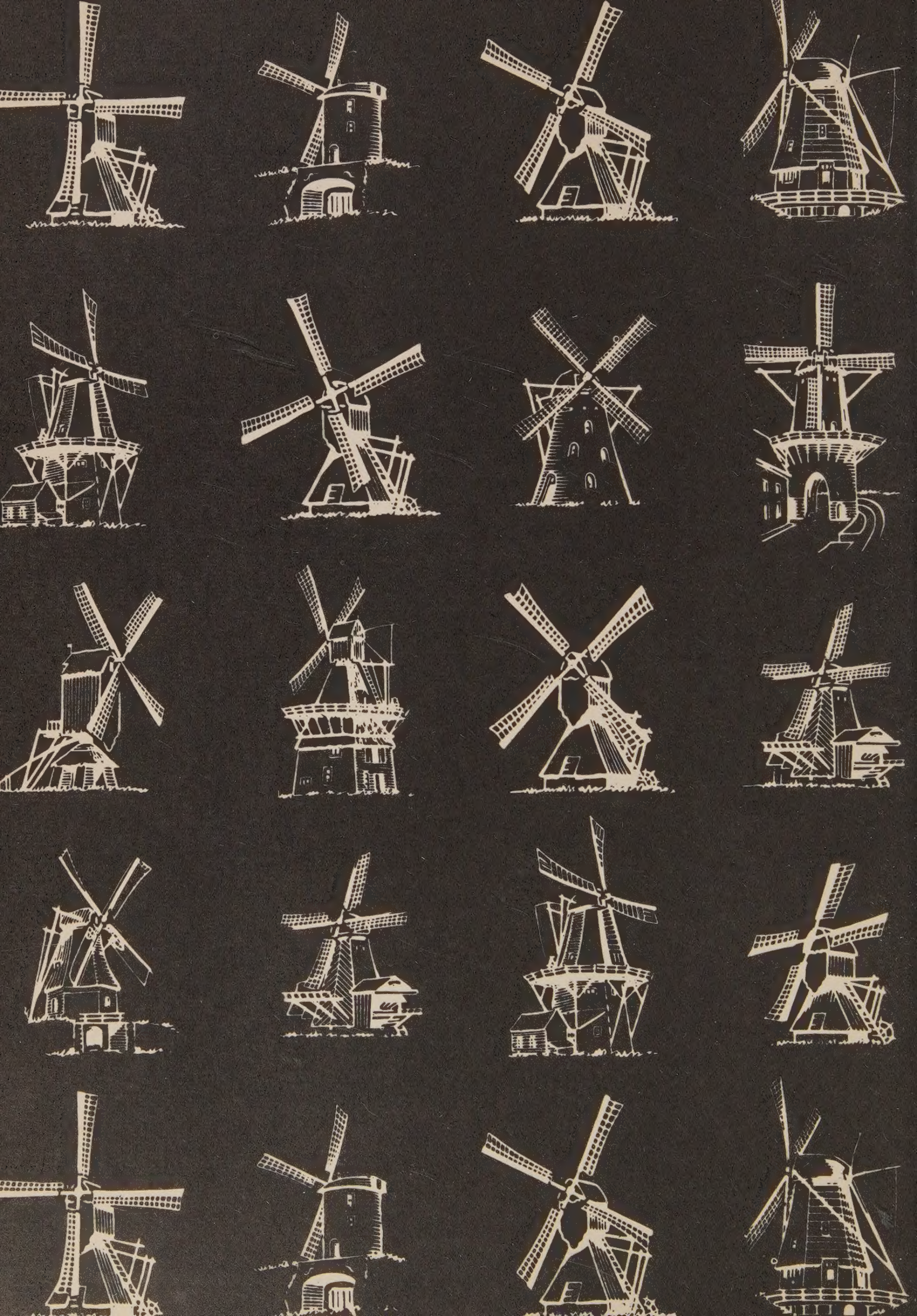
DUTCH WINDMILLS

32 DRAWINGS IN FULL COLOUR



Leen Molendijk

DUTCH WINDMILLS

32 WATERCOLOURS IN CHROMOLITHOGRAPHY

WITH AN INTRODUCTION BY B. VAN DER VEEN CZN.
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Front cover:

Drainage mill DE LOKKERTSCHE MOLEN at Hoogvliet, built in 1820.

Back cover:

Drainage mill with paddles at Geulem, (L.), built in 1643.

OUR WINDMILLS

It is not yet known where in our country the first windmill was built, but we can say with certainty that it was a post-corn mill, used as a rye mill. Owing to this the grinding of corn, which was performed by hand and frequently was the work of women, was over. This kind of mill is called the French mill, after the land of origin. Out of France it has found its way northward.

In the beginning of the twelfth century there were already windmills in Paris; about 1180 the first mill appeared in the south of the Netherlands, and Noord-Brabant had its first one in 1299. It was at Koevering, between St. Oedenrode and Schijndel.

Numbers 29, 4 and 17, of which the first picture shows an open post mill and numbers 4 and 17 show a locked post mill, are examples of this kind. The feature of this mill is that the whole construction under the square frame is visible, which is not the fact with a locked post mill, where everything is protected, so it can stand every kind of weather.

The first successor of the post mill, which can be wound round a vertical capstan, the upright timber shaft (or post), is the tower mill, set up with a round stone base, and covered with a cap, from which the spindle and the sail-cross reach out, and can be turned in every direction. Such a windmill is called a mill with turning cap, because only the cap can be turned; the round stone base does not move. The invention of such a mill with turning cap is ascribed to the Fleming Lief Andriesz. van Moerbeke (1573). There are still tower mills at Lienden (Betuwe) and at Zeddam (De Liemers).

A similar kind of windmill is the round stone mill with turning cap, which is narrow at the top and which was used to grind the corn, and for other purposes-as an oil mill, a sawmill, a paper mill, etc.

There have been many mills of this kind in our country. Numbers 3, 5, 16, 20, 22, 25, 30 and 31 show us examples of this kind of mill. Another shape of that kind is the wooden octagonal or hexagonal mill with turning cap, and with or without reefing stage, often with a stone base. We can see these mills in pictures 1, 2, 6, 7, 9, 10, 12, 13, 19, 26 and 28. Most mills at the Zaan were of this type; also in the north of our country they are of regular occurrence. We can see round stone mills with turning caps, which were used as drainage mills with paddles or an Archimedean water screw, on pages 12 (Hoogvliet) and 15 (Haastrecht).

Octagonal mills with turning caps, also in use as drainage mills, we can see in the so called mills with inside winding gears. The mills with turning caps are wound with a capstan or winch. Picture 17 shows us a mill which does not have the outside winding gear. The mill has to be wound from inside. The tower mills at Zeddam and Lienden already mentioned are mills with inside winding gears.

Another kind of drainage mill is the hollow post mill or the wip mill, which can be found in Zuid-Holland. Those are mills with turning caps, of which the caps are small and placed on a pyramidical base. The water usually is drawn up by a scoop wheel, which is locked (see 8 and 11). The spider mill is a smaller kind of wip mill and can be found in the provinces of Friesland and Groningen. The spidermill in the Openluchtmuseum (Open Air Museum at Arnhem) can be seen on page 32. In the north of the Netherlands this meant the start of draining, mostly for landlords, because these little mills had small capacity. They were precursors of the great octagonal drainage mills. The small meadow mill was a smaller kind of drainage mill than the spider mill.

Finally there is a type of mill, which can be used as a sawmill. This type of mill was invented at the Zaan, and can be found in this area (see 24 Zaandam). There are also a few in other parts of our country. The wind is mostly caught by canvasses, which are laid on the two stocks of the framework. That is the old Dutch way, but since about 1890 in the north of the Netherlands the wind has been caught by shuttered sails. It is not very beautiful, but more practical. See page 13, 14 and 26. This method was in use in the north of Germany and came to the Netherlands, but it was invented in England.

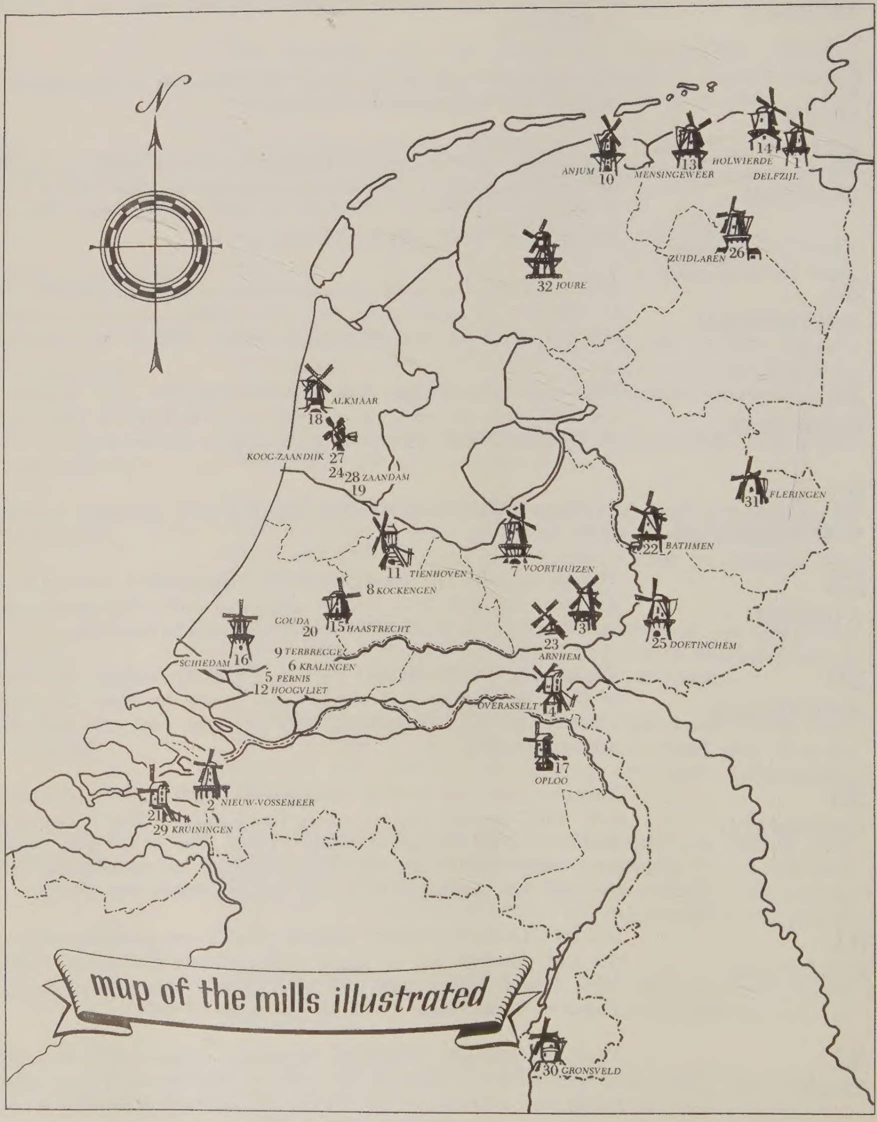
Another invention from the same area also came to the Netherlands, but was used only in the province Groningen. That is the self-turningprinciple which uses wind velocity at the back of the cap. At present there is no example left.

SHORT DESCRIPTION
OF THE WINDMILLS ILLUSTRATED

1 *DELFZIJL*	The corn- and hulling mill ADAM was built in 1875 at Delfzijl in place of an old mill, which had been destroyed by a fire. It is an octagonal mill with turning cap and a reefing stage on a platform, the so called ”molenberg.” In 1958 the mill was restored and at present it is in use as a museum.
2 *NIEUW-VOSSEMEER*	The corn mill ASSUMBURG at Nieuw-Vossemeer was set up there in 1899. It came from Assendelft, where it had been in use as an oil mill for more than a century (since 1778). It is an octagonal mill with a reefing stage, which was made around it.
3 *ARNHEM*	The corn mill DE KROON (”The Crown”) at Arnhem was built in 1870, but it really dates from 1847 and was brought to Arnhem. It is a round stone mill with turning cap and a reefing stage.
4 *OVERASSELT*	The corn mill ZELDENRUST (”seldom rest”) at Overasselt dates from 1725 and origins from Geertruidenberg. This mill was rebuilt at Overasselt in 1890. It is a locked post mill.
5 *PERNIS*	The corn mill DE ZWAAN (”swan”) at Pernis was built in 1819. It is a little round stone mill with turning cap. The sails were taken away in 1930, in consequence of which the landscape was disfigured.
6 *KRALINGEN*	The spice mill DE STER (”the star”) at Kralingen dates from 1792 and was rebuilt in 1866, but on July 13th 1962, it was destroyed by a fire. It is an octagonal mill with turning cap and a reefing stage.
7 *VOORTHUIZEN*	De corn mill WINDLUST at Voorthuizen was built on a so called ”belt” in 1881. An octagonal mill with turning cap, it was destroyed during the war.
8 *KOCKENGEN*	This drainage mill, DE SPENGENSE MOLEN, is very old. It was destroyed by fire and rebuilt in 1841. It is a wip mill with a covered scoop wheel.
9 *TERBREGGE*	The corn mill DE VIER WINDEN (”four winds”) at Terbregge was built in 1776. It is a round stone mill with turning cap and a reefing stage.

10 *ANJUM*	The corn- and hulling mill DE EENDRACHT ("harmony") at Anjum was built in 1889. The base is built of stone, on which the reefing stage rests. It is an octagonal mill with turning cap.
11 *TIENHOVEN*	The drainage mill DE TROUWE WACHTER ("faithful watcher") at Tienhoven is a wip mill with a covered outside scoop wheel. It was built in 1835 and restored in 1950.
12 *HOOGVLIET*	The drainage mill DE LOKKERTSCHE MOLEN at Hoogvliet was built in 1820. It was a round stone mill with reefing stage. In December 1954 it was pulled down.
13 *MENSINGEWEER*	The corn- and hulling mill HOLLANDS WELVAREN ("Dutch prosperity") at Mensingeweer was built in 1855. It is an octagonal mill with turning cap.
14 *HOLWIERDE*	The corn-, hulling- and timber sawmill DE HOOP ("hope") at Holwierde was built in 1851. It was an octagonal mill with turning cap and a reefing stage. It was destroyed during the war.
15 *HAASTRECHT*	This drainage mill at Haastrecht was built in 1862. It is a mill with turning cap and a reefing stage.
16 *SCHIEDAM*	The malt mill DE NOORD ("north") was built at Schiedam in 1803. The slim round stone trunk has a special shape. It is a round mill with turning cap and reefing stage of irregular construction.
17 *OPLOO*	The corn mill DE KORENBLOEM ("cornflower") at Oploo was built in 1800, although the year of building in another place is 1747. It is a locked post mill of picturesque shape.
18 *ALKMAAR*	The drainage mill DE GEESTMOLEN ("ghost mill") dates from 1565. Till 1886 it was in use as a scoop wheel mill. It is an octagonal mill with inside winding gear and Archimedean water screw.
19 *ZAANDAM*	The paint mill DE KAT ("cat") at Zaandam was built in 1646 and has been in use for almost three centuries. It is a mill with turning cap and a reefing stage and was probably also used as an oil mill. It was pulled down in 1904, but in 1960 it was rebuilt at the Zaanse Schans.
20 *GOUDA*	The corn mill DE RODE LEEUW ("red lion") was built before 1680. It stands at Gouda and is a mill with turning cap and a reefing stage.
21 *KRUININGEN*	The corn mill DE OUDE MOLEN ("old mill") was built at Kruiningen in 1801. It is an octagonal mill with turning cap without a reefing stage.

22 *BATHMEN*	The corn mill DE LEEUW ("the lion") was built about 1800. It is a mill with turning cap and a reefing stage and it stands at Bathmen.
23 *ARNHEM*	The drainage mill at the Open Air Museum at Arnhem is a "tjasker" and originated in Friesland.
24 *ZAANDAM*	The timber sawmill De GEKROONDE POELENBRUG ("crowned puddle bridge") was built at Zaandam in 1868. It is a type of sawmill, which was removed in 1904 and in 1963. Then it was brought to the Zaanse Schans.
25 *DOETINCHEM*	This corn mill was built on an earthen rampart at Doetinchem in 1850. It is a round stone mill with turning cap and a reefing stage. In 1920 it was dismantled but in 1965 it was restored.
26 *ZUIDLAREN*	This corn- and hulling mill DE WACHTER ("the watcher") originally was in use as an oil mill and was built in 1851. It is an octagonal mill with turning cap and a reefing stage.
27 *KOOG-ZAANDIJK*	Drainage mill, so-called small meadow mill, probably built in 1849.
28 *ZAANDAM*	The grind mill DE HUISVROUW ("housewife") was built at Zaandam in 1880. It is a little octagonal mill with turning cap and a reefing stage. In 1964 it was removed to Oostzaan.
29 *KRUININGEN*	The corn mill DE HOED ("the hat") at Kruiningen was built in 1857, but before that it had been in use for more than two centuries at Gent (Belgium). It is an open post mill and was restored in 1963.
30 *GRONSVELD*	This corn mill was built at Gronsveld in 1622. It is a round stone mill with turning cap of exceptional shape. The masonry is decorated with strings of scenic stones. The entire mill stands on a scenic stone base, which is unique in our country. In 1945 the mill was destroyed by a fire, but in 1959 it was rebuilt.
31 *FLERINGEN*	DE GROLLENMOLEN ("growling mill") was probably built in the 18th century, but we know with certainty that it was before 1870. It is a round stone mill with turning cap without reefing stage. In former days it was in use as an oil mill.
32 *JOURE*	Drainage mill DE GROENE MOLEN ("green mill") at Joure, of which 1466 is taken as the year of building. It is a so called spider mill with square stone base and Archimedean water screw.


map of the mills illustrated

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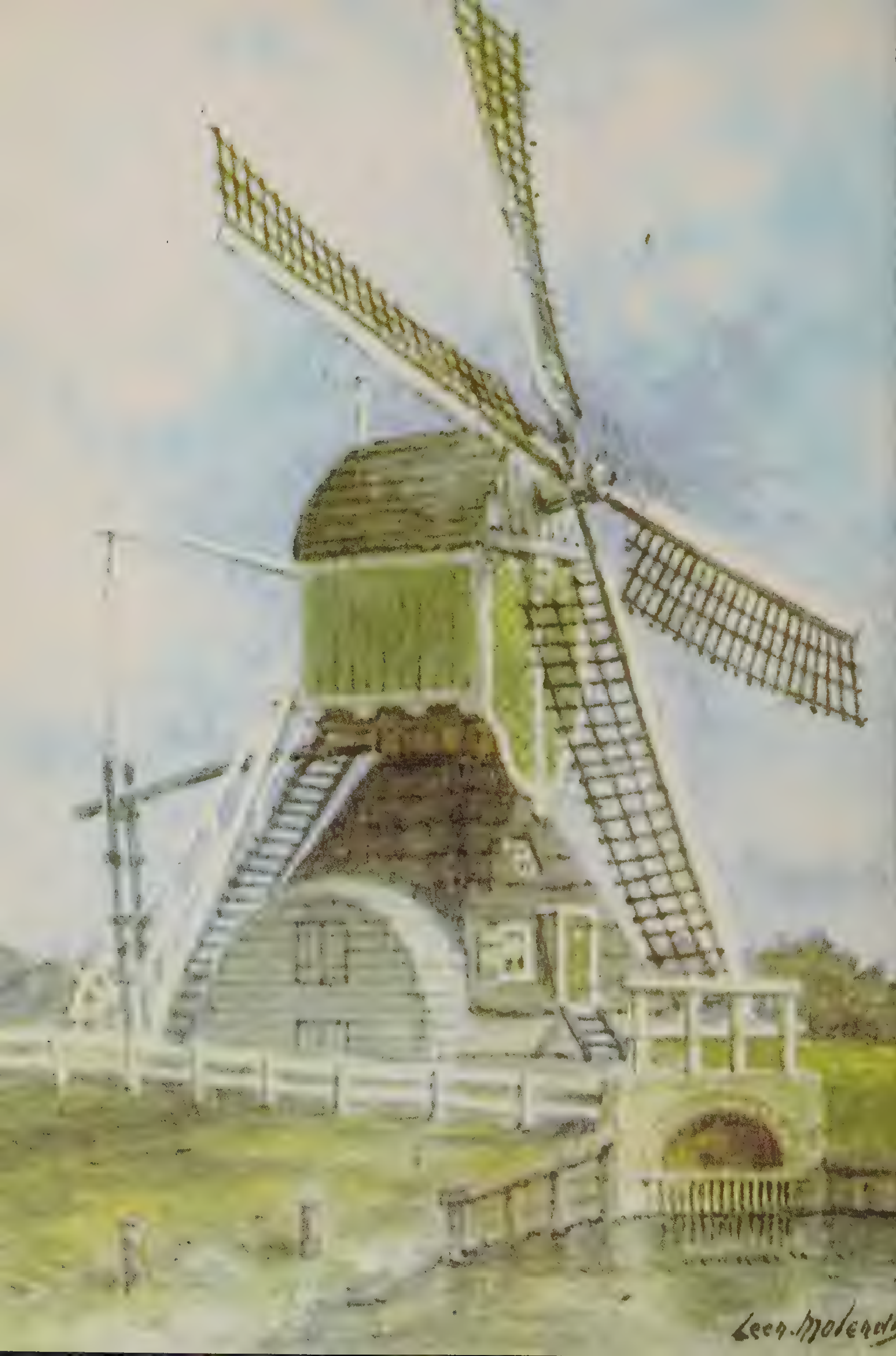
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